

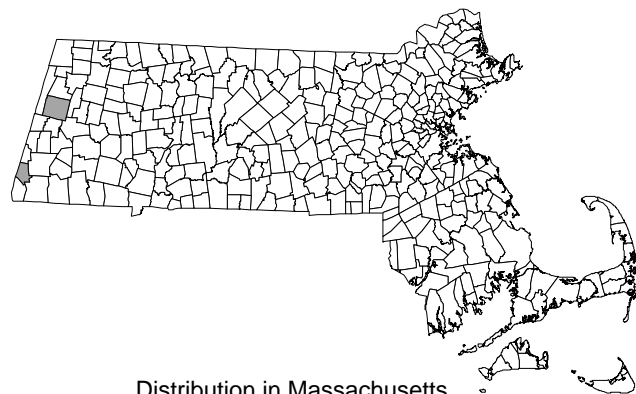


## Natural Heritage & Endangered Species Program

Massachusetts Division of Fisheries & Wildlife  
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[www.state.ma.us/dfwele/dfw/nhesp](http://www.state.ma.us/dfwele/dfw/nhesp)

**Description:** The capillary beak-rush (*Rhynchospora capillacea*) is a small (6 to 20 inches tall or about 1.5 to 5.0 dm), perennial herb with threadlike stems and leaves. Although the capillary beak-rush and the other beak-rushes do superficially resemble the group of plants called “rushes,” they do not belong to the Rush Family, and are actually members of the Sedge Family. The capillary beak-rush is quite delicate in appearance, due to its thread-like leaves, and may easily be overlooked. In Massachusetts, it generally grows in small, very wet, openings (such as along deer-paths, edges of wet depressions or channels, or seepy areas) in calcareous fens. Elsewhere in New England, it is also found growing on calcareous riverside seeps and on dripping, calcareous cliffs.

**Aids to identification:** To positively identify the capillary beak-rush and other beak-rushes (genus *Rhynchospora*), a technical manual should be consulted. It is best to examine the tiny fruits and flower bristles of the plant under magnification to distinguish the species of beak-rush. The beak rushes in general possess clusters of very inconspicuous flowers. Rather than having petals, the individual flowers possess tiny “bristles.”



Distribution in Massachusetts  
1980-2006

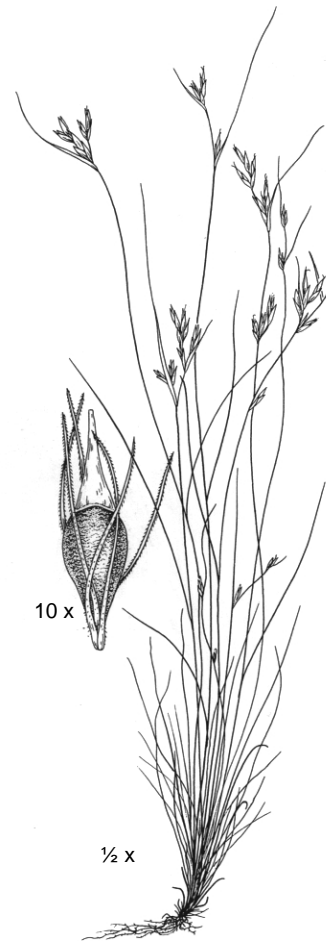
Based on Records in Natural Heritage Database

## Capillary Beak-rush or Beak-sedge

*Rhynchospora capillacea* Torr.

State Status: **Endangered**

Federal Status: None



Holmgren, Noel H. The Illustrated Companion to Gleason and Cronquist's Manual. NY Botanical Garden, 1998.

Their fruit is an “achene,” which is hard and nut-like and does not split open to release its seeds. Achenes in the beak-rushes are topped by a protuberance (called a “tubercle”), which varies in shape and size among species. In the capillary beak-rush, the achene is relatively elongate and narrowed gradually to the base. It is associated with six downwardly-barbed bristles, and is topped by a long, very gradually tapering tubercle, which looks like a dunce’s cap. The entire inflorescence is usually overtopped by a threadlike bract.

**Similar species:** There are several common beak-rushes that could be confused with the capillary beak-rush, and a technical manual should be consulted when trying to distinguish members of this genus. Two beak-rushes that have repeatedly been reported to co-occur with *R. capillacea* in the field are white beak-rush (*R. alba*) in fens, and brown beak-rush (*R. capitellata*) along rivershores. Capillary beak-rush differs from the white beak-rush in having fewer bristles per flower (six, as opposed to eight to fourteen in white beak-rush) that are not feathery at the base (plumose at the base in white beak-rush). To the naked eye, the capillary beak-rush has a narrower, ovoid cluster of flowers that is brownish, and the white beak-rush has a broader-tipped cluster of flowers that is white or tawny-colored. Capillary beak-rush differs from the brown beak-rush in having a narrower achene, with many fewer clusters of flowers. To the naked eye, the one or two clusters of flowers in *R. capillacea* are narrow and ellipse-shaped. In *R. capitellata*, there are usually several hemispheric clusters.

**Habitat:** In Massachusetts, this shade-intolerant species is found growing in open, mucky areas of calcareous fens, which are nutrient-rich peatlands that experience contact with local groundwater. Usually the plants are found growing in low, open areas of micro-disturbance, such as along deer paths or seepage channels. Plants associated with capillary beak-rush in Massachusetts include shrubby cinquefoil (*Dasiphora floribunda*), the fen-sedge (*Carex tetanica*), dioecious sedge (*Carex sterilis*), slender woolly-fruited sedge (*Carex lasiocarpa*), grass-of-Parnassus (*Parnassia glauca*), yellow sedge (*Carex flava*), white beak-rush (*Rhynchospora alba*), tamarack (*Larix laricina*), and black spruce (*Picea mariana*).

**Range:** The capillary beak-rush occurs from Newfoundland west to Saskatchewan, and south to Missouri, Tennessee and Virginia.

**Population status in Massachusetts:** Only two occurrences of the capillary beak-rush are currently known in Massachusetts, and only nine occurrences are known in all of New England. The two Massachusetts locations occur in Berkshire County, a region that supports nutrient-rich wetlands due to its underlying calcareous bedrock.

The capillary beak-rush is listed under the Massachusetts Endangered Species Act as Endangered. All listed species are protected from killing, collecting, possessing, or sale and from activities that would destroy habitat and thus directly or indirectly cause mortality or disrupt critical behaviors.

**Management Recommendations:** As for many rare species, exact needs for management of capillary beak-rush are not known. The following comments are based primarily on observations of populations in Massachusetts. Habitat conversion, alterations to local hydrology, and open wetland succession to forested wetland are the primary threats faced by this species. Management efforts should focus on maintaining local hydrology (including intact seepage areas) and maintaining open fen conditions with small areas of disturbance, such as those created by seeps and animal trails.

#### Fruit Present:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Updated: October 2006